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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspto@slwip.com
request@slwip.com

Office Action Summary

Application No.

09/933,928

Applicant(s)

PELIOTIS ET AL.

Examiner

FARZANA HOSSAIN

Art Unit

2424

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-8,10-12,17,19-21,23,25,26,29-36,38 and 72-77 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-8,10-12,17,19-21,23,25,26,29-36,38 and 72-77 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This action is in response to communications filed 05/29/2008. Claims 1, 3-8, 10-12, 17, 19, 23, 24, 26, 29-36, 72 and 73 are amended. Claims 2, 9, 1-16, 18, 24, 27, 28, 37, 39-71 are cancelled. Claims 20, 21, and 38 have been previously presented. Claims 74-77 are new.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 15, 17 and 19 have been considered but are moot in view of the new ground(s) of rejection.

Regarding Claims 1, 17 and 19, the applicant argues that Sezan nor (Abecassis and Kwoh) do not disclose each video segment stored in the video storage having an associated address for locating the video segment in the video storage; comparing content of each video segment to determine an associated preference indicator for each video segment, a subset of the associated tags indicating video segments that are designated as mandatory in the associated video preference indicator or storing an indication of mandatory video segments, storing an entry in a video segment storage for each video segment stored in the video storage, the entry comprising the associated address and successively playing preferred video segments by reading the video segment storage to video segments having a favorable preference indicator and

accessing the video segments having a favorable associated video preferences indicator using the associated address and downloading preferred video segments by reading the video segment storage to video segments having a favorable preference indicator and accessing the video segments having a favorable associated video preference indicator using the associated address (Pages 12-13).

In response to the applicant, Abecassis discloses compares the associated tags from each video segment with viewer preferences to determine an associated video preference indicator (data that indicates segments with user preferences) for each segment (Column 11, lines 15-20) Column 10, lines 10-16, Column 5, lines 5-12, Column 7, lines 8-26, Column 8, lines 39-52, Column 14, lines 10-13, Column 15, lines 52-57, Figures 1A-C); a video segment database or a database storing an entry for video segments as there is a segment table with data integrating data relating to both segments and user preferences (Figure 5, 622, Column 11, lines 15-20, Column 5, lines 17-20); a subset of the associated tags indicating video segments that are designated as mandatory in the associated video preference indicator or storing an indication of mandatory video segments such as advertisements in the video segment database via special codes that do not interfere with the playing of commercials regardless of preferences (Column 16, lines 43-60, Column 11, lines 15-20) and successively plays the preferred video segments by reading the video segment storage (sequentially accessing preferences and tags stored in the database or accessing sequentially tags and markers based on the scenes or segments) (Column 11, lines 15-30) to select video segments having a favorable associated video preference indicator (Column 13,

lines 15-21) and accessing the video segments having a favorable associated video preference indicator (Column 13, lines 15-21, Column 10, lines 10-16, Column 5, lines 5-12). Abecassis and Kwoh do not disclose each video segment stored in the video storage having an associated address for locating the video segment in the video storage; the entry comprising the associated address and successively playing video segments by reading the video segment storage and accessing the video segments using the associated address, downloading the segment by reading the video segment storage and accessing the video segments using the associated address.

See new rejection.

3. All other dependent claims depend on the independent claims and no argument was made to any specific dependent claim.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3, 5-8, 10-12, 17, 19-21, 23, 36, 38 and 72-77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abecassis (US 6,011,895) in view of Kwoh et

al (US 6,226,793 and hereafter referred to as "Kwoh"), Ching et al (US 7,222,354 and hereafter referred to as "Ching").

Regarding Claims 1 and 19, Abecassis discloses a method of selecting preferred video segments from a plurality of video segments within a video stream, a system of selecting preferred video segments from a continuous series of video segments within a video stream (Column 7, lines 16-26, Figure 1, Figure 3, Figure 5), the method and system comprising:

a set top box (STB) that receives the video stream, the video stream comprising a continuous series of video segments or sequential series of segments of a program to play to the viewer (Figure 3, Column 8, lines 62-64);

the STB separates markers encoded within the video stream, the markers indicating divisions or beginning and ending frames between the plurality of video segments of the video stream (Column 8, lines 39-45); the STB separates tags encoded within the video stream, each video segment having associated tags, the tags provide information relating to the content of an associated video segment (Figures 1A-1C, Column 7, lines 8-15, 28-67, Column 8, lines 1-26, 39-52, Column 6, lines 44-55, Column 5, lines 17-20);

a video storage to store the plurality of video segments, the plurality of video segments identified from the video stream using the markers (Figure 5, 611, 612, Column 11, lines 15-30, 59-65);

a user preference database, the user preference database storing viewer preferences from a viewer (Figure 5, 651, Column 10, lines 57-65, Figure 1, Column 7, lines 8-15);

a comparator compares the associated tags from each video segment with viewer preferences to determine an associated video preference indicator (data that indicates segments with user preferences) for each segment (Column 11, lines 15-20) Column 10, lines 10-16, Column 5, lines 5-12, Column 7, lines 8-26, Column 8, lines 39-52, Column 14, lines 10-13, Column 15, lines 52-57, Figures 1A-C);

a video segment database or a database storing an entry for video segments as there is a segment table with data integrating data relating to both segments and user preferences (Figure 5, 622, Column 11, lines 15-20, Column 5, lines 17-20); a subset of the associated tags indicating video segments that are designated as mandatory in the associated video preference indicator or storing an indication of mandatory video segments such as advertisements in the video segment database via special codes that do not interfere with the playing of commercials regardless of preferences (Column 16, lines 43-60, Column 11, lines 15-20);

a playback system that successively plays the preferred video segments by reading the video segment storage (sequentially accessing preferences and tags stored in the database or accessing sequentially tags and markers based on the scenes or segments) (Column 11, lines 15-30) to select video segments having a favorable associated video preference indicator (Column 13, lines 15-21) and accessing the video

segments having a favorable associated video preference indicator (Column 13, lines 15-21, Column 10, lines 10-16, Column 5, lines 5-12).

Abecassis does not explicitly disclose a decoder decoding the tags and markers; each video segment stored in the video storage having an associated address for locating the video segment in the video storage; the entry comprising the associated address and successively playing video segments by reading the video segment storage and accessing the video segments using the associated address, successively playing the segments by reading the video segment storage and accessing the video segments using the associated address.

In analogous art, Kwoh discloses a method of selecting preferred video segments and excluding unwanted video segments from a plurality of video segments within a video stream (Figure 26) comprising: encoding markers within the video stream (Column 13, lines 33-64, Figure 23, 664, 668 Figure 24, 684, 688, 693, 694), the markers having a position in the video stream that indicates a division between the plurality of video segments of the video stream (Figure 23, 664, 668, Figure 24, 684, 688, 693, 694); encoding tags within the video stream that indicate content of each video segment (Column 13, lines 33-64, Figure 21); receiving a video stream, the video stream comprising a continuous series of video segments (Figures 23 and 24); using video preference information of the viewer to select the preferred video segments and exclude the unwanted video segments by comparing the tags with the video preference information of the viewer (Figure 26). Kwoh discloses that step of encoding tags and markers within the video stream comprise encoding tags and markers manually by a

use of computer (Figure 20, 10007). Kwoh discloses a video blanking interval decoder that decodes the tags and makers from the regular video stream (Figure 25, 706, 708). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Abecassis to include decoder that decodes the tags and makers from the regular video stream (Figure 25, 706, 708) as taught by Kwoh in order to provide parental control on all broadcasts and transmissions to a STB (Column 1, lines 14-16, 55-57) as disclosed by Kwoh.

Furthermore, in *KSR International Co. v. Teleflex Inc.*, the Court found that the claim would have been obvious because the substitution of one known element for another would have yield predictable results to one of ordinary sill in the art at the time of the invention.

The combination is silent on each video segment stored in the video storage having an associated address for locating the video segment in the video storage; storing an entry in a video segment storage for each video segment stored in the video storage, the entry comprising the associated address and successively playing video segments by reading the video segment storage and accessing the video segments using the associated address.

In analogous art, Ching discloses each video segment stored in the video storage (Figure 5B, 50) having an associated address for locating or where the video segment is stored in the video storage (Column 6, lines 43-51, Figure 3, Column 5, lines 44-46); storing an entry in a video segment storage (Figure 5, 53) for each video segment stored in the video storage, the entry comprising the associated address or

location (Column 5, lines 44-46, Figure 3); and successively playing video segments by reading the video segment storage to select video segment and accessing the video segments using the associated address (Column 5, lines 44-46, Figure 3, Column 6, lines 43-51).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination to include each video segment stored in the video storage (Figure 5B, 50) having an associated address for locating or where the video segment is stored in the video storage (Column 6, lines 43-51, Figure 3, Column 5, lines 44-46); storing an entry in a video segment storage (Figure 5, 53) for each video segment stored in the video storage, the entry comprising the associated address or location (Column 5, lines 44-46, Figure 3); and successively playing video segments by reading the video segment storage to select video segment and accessing the video segments using the associated address (Column 5, lines 44-46, Figure 3, Column 6, lines 43-51) as taught by Ching in order to provide customized segments in order of receiving the segments (Column 2, lines 31-45) as disclosed by Ching.

Regarding Claims 17, Abecassis discloses a method of selecting preferred video segments from a plurality of video segments within a video stream, a system of selecting preferred video segments from a continuous series of video segments within a video stream (Column 7, lines 16-26, Figure 1, Figure 3, Figure 5), the method and system comprising:

receiving the video stream, the video stream comprising a continuous series of video segments or sequential series of segments of a program to play to the viewer (Figure 3, Column 8, lines 62-64);

separating markers encoded within the video stream, the markers indicating divisions or beginning and ending frames between the plurality of video segments of the video stream (Column 8, lines 39-45);

separating tags encoded within the video stream, each video segment having associated tags, the tags provide information relating to the content of an associated video segment (Figures 1A-1C, Column 7, lines 8-15, 28-67, Column 8, lines 1-26, 39-52, Column 6, lines 44-55, Column 5, lines 17-20);

storing the plurality of video segments from the video stream in a local video storage (Figure 5, 611, 612),

comparing video preference information of a viewer to the associated tags from each video segment to determine an associated video preference indicator (data that indicates segments with user preferences) for each segment (Column 11, lines 15-20) Column 10, lines 10-16, Column 5, lines 5-12, Column 7, lines 8-26, Column 8, lines 39-52, Column 14, lines 10-13, Column 15, lines 52-57, Figures 1A-C);

a video segment database or a database storing an entry for video segments as there is a segment table with data integrating data relating to both segments and user preferences (Figure 5, 622, Column 11, lines 15-20, Column 5, lines 17-20); a subset of the associated tags indicating video segments that are designated as mandatory in the associated video preference indicator or storing an indication of mandatory video

segments such as advertisements in the video segment database via special codes that do not interfere with the playing of commercials regardless of preferences (Column 16, lines 43-60, Column 11, lines 15-20);

and downloading preferred video segments from the video content from the local video storage reading the video segment storage to select video segments having a favorable associated video preference indicator (Column 11, lines 1-15, Column 13, lines 15-21) and accessing the video segments having a favorable associated video preference indicator (Column 13, lines 15-21, Column 10, lines 10-16, Column 5, lines 5-12).

Abecassis does not explicitly disclose a decoder decoding the tags and markers; each video segment stored in the video storage having an associated address for locating the video segment in the video storage; storing an entry in a video segment storage for each video segment stored in the video storage, the entry comprising the associated address and downloading the segments by reading the video segment storage and accessing the video segments using the associated address.

In analogous art, Kwoh discloses a method of selecting preferred video segments and excluding unwanted video segments from a plurality of video segments within a video stream (Figure 26) comprising: encoding markers within the video stream (Column 13, lines 33-64, Figure 23, 664, 668 Figure 24, 684, 688, 693, 694), the markers having a position in the video stream that indicates a division between the plurality of video segments of the video stream (Figure 23, 664, 668, Figure 24, 684, 688, 693, 694); encoding tags within the video stream that indicate content of each

video segment (Column 13, lines 33-64, Figure 21); receiving a video stream, the video stream comprising a continuous series of video segments (Figures 23 and 24); using video preference information of the viewer to select the preferred video segments and exclude the unwanted video segments by comparing the tags with the video preference information of the viewer (Figure 26). Kwoh discloses that step of encoding tags and markers within the video stream comprise encoding tags and markers manually by a use of computer (Figure 20, 10007). Kwoh discloses a video blanking interval decoder that decodes the tags and makers from the regular video stream (Figure 25, 706, 708). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Abecassis to include decoder that decodes the tags and makers from the regular video stream (Figure 25, 706, 708) as taught by Kwoh in order to provide parental control on all broadcasts and transmissions to a STB (Column 1, lines 14-16, 55-57) as disclosed by Kwoh.

Furthermore, in *KSR International Co. v. Teleflex Inc.*, the Court found that the claim would have been obvious because the substitution of one known element for another would have yield predictable results to one of ordinary sill in the art at the time of the invention.

The combination is silent on each video segment stored in the video storage having an associated address for locating the video segment in the video storage; storing an entry in a video segment storage for each video segment stored in the video storage, the entry comprising the associated address and downloading video segments

by reading the video segment storage and accessing the video segments using the associated address.

In analogous art, Ching discloses each video segment stored in the video storage (Figure 5B, 50) having an associated address for locating or where the video segment is stored in the video storage (Column 6, lines 43-51, Figure 3, Column 5, lines 44-46); storing an entry in a video segment storage (Figure 5, 53) for each video segment stored in the video storage, the entry comprising the associated address or location (Column 5, lines 44-46, Figure 3); and downloading the video segments from the local video storage by reading the video segment storage to select video segment and accessing the video segments using the associated address (Column 5, lines 44-46, Figure 3, Column 6, lines 43-51).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination to include each video segment stored in the video storage (Figure 5B, 50) having an associated address for locating or where the video segment is stored in the video storage (Column 6, lines 43-51, Figure 3, Column 5, lines 44-46); storing an entry in a video segment storage (Figure 5, 53) for each video segment stored in the video storage, the entry comprising the associated address or location (Column 5, lines 44-46, Figure 3); and downloading video segments from the local video storage by reading the video segment storage to select video segment and accessing the video segments using the associated address (Column 5, lines 44-46, Figure 3, Column 6, lines 43-51) as taught by Ching in order to provide

customized segments in order of receiving the segments (Column 2, lines 31-45) as disclosed by Ching.

Regarding Claim 3, Abecassis, Kwoh and Ching disclose all the limitations of Claim 1. Kwoh discloses encoding the associated tags and markers within the video stream manually by a use of computer (Figure 20, 10007).

Regarding Claim 5, Abecassis, Kwoh and Ching disclose all the limitations of Claim 1. Abecassis discloses that the associated markers within the video stream are encoded with markers video stream based upon detection of changes of scenes (Figure 3A).

Regarding Claim 6, Abecassis, Kwoh and Ching disclose all the limitations of Claim 1. Abecassis discloses comparing video preference information of the viewer to select preferred video segments within a video stream comprises comparing key words are input by the viewer with the tags that have been placed within the video stream (Column 7, lines 8-26, Column 8, lines 38-45).

Regarding Claim 7 and 23, Abecassis, Kwoh and Ching disclose all the limitations of Claims 1 and 19 respectively. Abecassis discloses that encoding the associated tags within the video steam such as the topic (Column 7, lines 8-26). Kwoh discloses placing the information from an EPG into the video stream relating to the video segment (Column 14, lines 46-67, Column 15, lines 1-21).

Regarding Claim 8, Abecassis, Kwoh and Ching disclose all the limitations of Claim 1. Kwoh discloses the tags and markers are encoded in the vertical blanking interval (Column 13, lines 50-55, Column 14, lines 66-67, Column 15, lines 1-9).

Regarding Claim 10, Abecassis, Kwoh and Ching disclose all the limitations of Claim 1. Ching discloses successively playing preferred video segments (Column 5, lines 44-46, Figure 3, Column 6, lines 43-51). Abecassis discloses successively playing preferred segments (Column 13, lines 15-21 as segments are sequentially displayed) and that skipping to a next video segment upon receiving an input control signal from a user input device (Column 7, lines 8-26, Column 5, lines 24-36, Column 11, line 35) and proceeding to a selected video segment (Column 7, lines 8-26, Column 5, lines 24-36).

Regarding Claim 11, Abecassis, Kwoh and Ching disclose all the limitations of Claim 1. Ching discloses successively playing preferred video segments (Column 5, lines 44-46, Figure 3, Column 6, lines 43-51). Abecassis discloses successively playing preferred segments (Column 13, lines 15-21 as segments are sequentially displayed) and that excluding the video segments that do not have tags that match any preferred content tags in the video preference information of the viewer (Column 10, lines 10-16, Column 5, lines 5-12, Column 7, lines 8-26, Column 8, lines 39-52). Kwoh discloses excluding the video segments that do not have tags that match any preferred content tags in the video preference information of the viewer (Figures 23 and 24).

Regarding Claim 12, Abecassis, Kwoh and Ching all the limitations of Claim 1. Ching discloses successively playing preferred video segments (Column 5, lines 44-46, Figure 3, Column 6, lines 43-51). Abecassis discloses successively playing preferred

segments (Column 13, lines 15-21 as segments are sequentially displayed) and excluding the video segments that match undesired content tags in the video preference information of the viewer (Column 7, lines 20-23, Column 10, lines 10-16).

Regarding Claim 20, Abecassis, Kwoh and Ching disclose all the limitations of Claim 19. Abecassis discloses a personal video recorder for filtering the video stream based on a viewer's habits and preferences to provide video segments to be viewed by the viewer (Figure 5, 601, 631, 612, Column 10, lines 33-67, Column 11, lines 1-30).

Regarding Claim 21, Abecassis, Kwoh and Ching disclose all the limitations of Claim 19. Kwoh discloses a video blanking interval decoder that separates the tags and makers from the regular video stream (Figure 25, 706, 708).

Regarding Claim 36, Abecassis, Kwoh and Ching disclose all the limitations of Claim 19. See rejection of claim 3. Kwoh discloses that the plurality of video segments in the video stream comprise a live broadcast signal that is sent to the STB at a viewer's premises (Column 13, lines 33-64).

Regarding Claim 38, Abecassis, Kwoh and Ching disclose all the limitations of Claim 19. Abecassis discloses a viewer personalized remote control or input device (Figure 5, 655, 656, 657) that transmits the video preference information to the system (Figure 5, 651).

Regarding Claims 72 and 73, Abecassis, Kwoh and Ching disclose all the limitations of Claims 1 and 17 respectively. Abecassis disclose storing an indication of mandatory video segments such as advertisements in the video segment database via

special codes that do not interfere with the playing of commercials regardless of preferences (Column 16, lines 43-60, Column 11, lines 15-20);

Regarding Claims 74 and 76, Abecassis, Kwoh and Ching disclose all the limitations of Claims 1 and 17 respectively. Abecassis discloses the entry comprises the associated tag as the integration includes the content map (Column 11, lines 15-20).

Regarding Claims 75 and 77, Abecassis, Kwoh and Ching disclose all the limitations of Claims 1 and 17 respectively. Abecassis discloses the entry comprises the video preference indicator as the segment table is generated by integrating the preference information and the content map (Column 11, lines 15-20).

6. Claims 4 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abecassis in view of Kwoh and Ching as applied to claim 1 above, and further in view of Maybury et al (US 6,961,954 and hereafter referred to as "Maybury").

Regarding Claims 4 and 33, Abecassis, Kwoh and Ching disclose all the limitations of Claims 1 and 19 respectively. Kwoh discloses encoding the associated tags and markers within the video stream (Figure 20, 10007). Abecassis discloses that the associated markers within the video stream are encoded (Figure 3A). Abecassis, Kwoh and Ching are silent on encoding tags and markers comprise encoding tags and markers automatically by use of voice recognition techniques. Maybury discloses encoding markers within a video stream (Column 9, lines 42-67, Column 10, lines 1-21, 34-48) which indicates a division between a plurality of segments (Column 9, lines 42-67, Column 10, lines 1-21, 34-48) by using voice recognition (Column 10, lines 33-40)

and encoding tags comprising keywords (Column 16, lines 48-56) by using voice recognition (Column 18, lines 38-67). Therefore, it would have been obvious to one of ordinary skill in the art to modify the combination to include encoding markers (Column 9, lines 42-67, Column 10, lines 1-21, 34-48) by using voice recognition (Column 10, lines 33-40) and encoding tags (Column 16, lines 48-56) by using voice recognition (Column 18, lines 38-67) as taught by Maybury in order to provide a more efficient tool of allowing a user to catalog and search multimedia information which is more accurate (Column 1, lines 54-67) as disclosed by Maybury.

7. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abecassis in view of Kwoh and Ching as applied to claim 19 above, and further in view of Eyer (US 6,483,547).

Regarding Claim 25, Abecassis, Kwoh and Ching disclose all the limitations of Claim 19. Kwoh discloses encoding the associated tags and markers within the video stream (Figure 20, 10007). Abecassis discloses that the associated markers within the video stream are encoded (Figure 3A). Abecassis, Kwoh and Ching are silent on the tags and markers being analog. Eyer discloses that the tags and markers are encoded as analog data in the video stream to generate the encoded video stream (Figure 1, 16). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination to encode tags and markers as analog data to generate the encoded video stream (Figure 1, 16) as taught

by Eyer in order to use identification data to access information about the program (Column 2, lines 29-41) as disclosed by Eyer.

8. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abecassis in view of Kwoh and Ching as applied to claim 19 above, and further in view of Beckman et al (US 6,675,388 and hereafter referred to as "Beckman").

Regarding Claim 26, Abecassis, Kwoh and Ching disclose all the limitations of Claim 19. Kwoh discloses encoding the associated tags and markers within the video stream (Figure 20, 10007). Abecassis discloses that the associated markers within the video stream are encoded (Figure 3A). Abecassis, Kwoh and Ching are silent on the tags and markers being digital. Beckman discloses that the tags and markers are encoded as digital data or that digital data is inserted into the VBI in the video stream to generate the encoded video stream (Column 4, lines 33-35). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination to encode tags and markers as digital data to generate the encoded video stream (Column 4, lines 33-35) as taught by Beckman in order to coordinate distribution of digital and analog broadcasts to receivers (Column 2, lines 1-11) as disclosed by Beckman.

9. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abecassis in view of Kwoh and Ching as applied to claim 19 above, and further in view of Elenbaas et al (US 2005/0028194 and hereafter referred to as "Elenbaas").

Regarding Claim 29, Abecassis and Kwoh and Ching disclose all the limitations of Claim 19. Kwoh discloses encoding the associated tags and markers within the video stream (Figure 20, 10007). Abecassis discloses that the associated markers within the video stream are encoded (Figure 3A). Abecassis, Kwoh and Ching are silent on encoding tags and markers detecting changes in flesh tone. Elenbaas discloses detecting changes in flesh tone for image analyze of important scenes or story segments (Page 4, paragraph 0028). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination to encode tags and markers by detecting changes in flesh tone (Page 4, paragraph 0028) as taught by Elenbaas in order to improve search and retrieve techniques for interest in television program (Page 1, paragraph 0008) as disclosed by Elenbaas.

10. Claims 30, 32 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abecassis in view of Kwoh and Ching as applied to claim 19 above, and further in view of Ahmad et al (US 6,880,171 and hereafter referred to as "Ahmad").

Regarding Claims 30 and 34, Abecassis, Kwoh and Ching disclose all the limitations of Claim 19. Kwoh discloses insertion of associated markers for diversion between video segments (Figures 23 and 24). Abecassis, Kwoh and Ching are silent on encoding tags and markers detecting changes in audio including music within the video stream. Ahmad discloses detecting changes in audio levels including music (Column 25, lines 17-40). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination to encode

markers by detecting changes in audio levels including music (Column 5, lines 17-25) as taught by Ahmad in order to categorize and organize segments of information (Column 1, lines 39-62) as disclosed by Ahmad.

Regarding Claim 32, Abecassis, Kwoh and Ching disclose all the limitations of Claim 19. Kwoh discloses insertion of associated markers for diversion between video segments (Figures 23 and 24). Abecassis, Kwoh and Ching are silent on markers inserted to indicate the division between the video segments and tags inserted to indicate content by automatic detection of changes in color within the video stream. Ahmad discloses that markers inserted to indicate the division between the video segments and tags inserted to indicate content by automatic detection of changes in color within the video stream (Column 16, lines 37-53). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination to insert markers to indicate the division between the video segments to indicate content by automatic detection of changes in color within the video stream (Column 16, lines 37-53) as taught by Ahmad in order to categorize and organize segments of information (Column 1, lines 39-62) as disclosed by Ahmad.

11. Claims 31 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abecassis in view of Kwoh and Ching as applied to claim 19 above, and further in view of Gove (5,099,322).

Regarding Claim 31, Abecassis, Kwoh and Ching disclose all the limitations of Claim 19. Kwoh discloses insertion of associated markers for diversion between video

segments (Figures 23 and 24). Abecassis, Kwoh and Ching are silent on the video stream being encoded based on detection of changes in light levels. Gove discloses that each video segment is defined by automatic detection of changes in light level within the video stream (Column 3, lines 1-16). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination to insert markers to indicate the division between the video segments and insert tags to indicate content by automatic detection of changes in light levels within the video stream (Column 3, lines 1-16) as taught by Gove in order to analyze the scene changes in a video signal (Column 1, lines 65-68) as disclosed by Gove.

Regarding Claim 35, Abecassis, Kwoh and Ching disclose all the limitations of Claim 19. Kwoh discloses insertion of associated markers for diversion between video segments (Figures 23 and 24). Abecassis, Kwoh and Ching are silent on the video stream being encoded based on detection of scene changes. Gove discloses that each video segment is defined by automatic detection of changes in scenery (Column 3, lines 13-21). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination to insert markers to indicate the division between the video segments is defined by automatic detection of changes in scenery (Column 3, lines 13-21) as taught by Gove in order to analyze the scene changes in a video signal (Column 1, lines 65-68) as disclosed by Gove.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FARZANA HOSSAIN whose telephone number is (571)272-5943. The examiner can normally be reached on Monday-Friday 8:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Christopher Kelley/
Supervisory Patent Examiner, Art
Unit 2424

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